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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/608,051	06/30/2000	Manuel Rosendo Arana-Manzano	4015-735	9426

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EXAMINER

BRINEY III, WALTER F

ART UNIT	PAPER NUMBER
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2644

DATE MAILED: 06/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Advisory Action

Application No.

09/608,051

Applicant(s)

ARANA-MANZANO ET AL.

Examiner

Walter F Briney III

Art Unit

2644

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 13 May 2004 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

PERIOD FOR REPLY [check either a) or b)]

- a) ☐ The period for reply expires _____ months from the mailing date of the final rejection.
- b) ☒ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection. ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. ☐ A Notice of Appeal was filed on _____. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.
2. ☐ The proposed amendment(s) will not be entered because:
- (a) ☐ they raise new issues that would require further consideration and/or search (see NOTE below);
 - (b) ☐ they raise the issue of new matter (see Note below);
 - (c) ☐ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
 - (d) ☐ they present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: _____

3. ☐ Applicant's reply has overcome the following rejection(s): _____.
4. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
5. ☒ The a) ☐ affidavit, b) ☐ exhibit, or c) ☒ request for reconsideration has been considered but does NOT place the application in condition for allowance because: see attached.
6. ☐ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.
7. ☐ For purposes of Appeal, the proposed amendment(s) a) ☐ will not be entered or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: _____.

Claim(s) objected to: _____.

Claim(s) rejected: _____.

Claim(s) withdrawn from consideration: _____.

8. ☐ The drawing correction filed on _____ is a) ☐ approved or b) ☐ disapproved by the Examiner.
9. ☐ Note the attached Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____.
10. ☐ Other: _____

MINSUN OH HAEVEY
PRIMARY EXAMINER

The amendment, filed 13 March 2004, will be entered because it is a request to cancel claims 19-23, and does not require further search and consideration.

Response to Arguments

Applicant's arguments with respect to claims 1-18 and 24-31, filed 13 May 2004, have been fully considered but they are not persuasive.

With respect to claim 1, the applicant alleges that the autocorrelation function of Hinman has been incorrectly characterized as a measurement of signal energy (amendment, page 7, paragraph 2); the examiner respectfully disagrees. In particular, the examiner maintains that the autocorrelation function disclosed by Hinman is fully dependent on the energy of the received signal. As evidence, Hinman discloses an autocorrelation coefficient $R_{(0)}$ (column 4, equation 1). It is a typical energy measurement. The examiner has interpreted the other autocorrelation coefficients as time shifted energy measurements because an absolute value function is applied to them (column 5, lines 47-49). If the received signal was static, the level of each coefficient would be the same, however, a periodic signal (e.g. ringback) will reflect a discernible pattern. The summation of each of these energy measurements provides the energy of the received signal of the claim. Furthermore, claim 1 is directed to a method comprising the step of comparing said energy to said threshold. The term "comprising" means that the claim includes the limitation, but is not necessarily limited to only that limitation. Therefore, the examiner maintains the rejection because the

comparing of the autocorrelation result comprises comparing each element of the autocorrelation result, which are time-shifted energy coefficients, to the threshold

The applicant further alleges that the threshold is not a function of speaker energy (amendment, page 7, paragraph 3); the examiner respectfully disagrees. In particular, ERLE is a ratio of error signal energy to microphone input (column 6, equation 12). Clearly, when echo is concerned, microphone input is a function of speaker energy. Therefore, ERLE is a function of speaker energy. Because the threshold is calculated based on the ERLE, the threshold is a function of received energy (column 5, lines 61-65). Furthermore, claim 1 is directed to a method that calculates the threshold based on said energy in said received signal. As shown above, ERLE is a function of speaker energy (i.e. based on received energy). Therefore, the examiner maintains the rejection.

Claims 16 and 24 are essentially the same as claim 1 and their rejections are maintained for the same reasons as claim 1.

With respect to claims 2-15, 17, 18, and 25-31, the applicant alleges that they are allowable for the same reasons as claims 1, 16, and 24. Because the examiner has maintained the rejections of claims 1, 16, and 24, the rejections of these claims are also maintained.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Walter F Briney III whose telephone number is 703-305-0347. The examiner can normally be reached on M-F 8am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Forester W Isen can be reached on 703-305-4386. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

WFB
6/4/04